

Anterior and posterior rows of eyes slightly procurved, the former narrower than the latter (22/27). Eyes of the anterior row subequal, the anterior median eyes closer to the anterior lateral than to each other, being separated from each other by more than a diameter, from the anterior lateral by five-eighths of a diameter. Eyes of the posterior row subequidistant, separated by more than two times the diameter of a posterior median eye, the posterior lateral eyes somewhat larger than the posterior median. Median ocular quadrangle about as wide as long, as wide in front as behind; the posterior eyes about two-thirds as large as the anterior. Clypeus equal in height to about five-eighths the diameter of an anterior median eye. Chelicerae, 3.00 mm long; lower cheliceral margin armed with four teeth of which the basal is small and weak while the distal three are large and robust, upper margin armed with two teeth, one large and one small. Tibiae I and II with 2-2 spines below. Tibia and patella I, 10.49 mm long (tibia alone, 7.52 mm); tibia and patella IV, 9.41 mm long (tibia alone, 6.73 mm).

Epigynum about as long as wide, consisting of a deep chitinized atrium flanked by heavy side pieces. For further details regarding the structure of the epigynum see Fig. 4.

Type locality.—California: Female holotype from Mohave Desert (no further data) in the United States National Museum (U.S.N.M. Cat. No. 1273).

Olios albinus, n. sp.

Fig. 3

Female.—Total length, 12.87 mm. Carapace, 4.95 mm long, 4.65 mm at the widest place, 3.17 mm wide in front. Abdomen, 7.43 mm. long, 5.94 mm wide. Dorsum of the carapace whitish, the pars cephalica outlined with minute punctations. Eye region, clypeus, and chelicerae tinged with orange, the claws of the chelicerae blackish. Sternum and coxae white, labium and endites light brown with whitish distal patches. Legs uniform white below, above whitish with sparse punctations except for the metatarsi and tarsi which are brown contrasting with the other joints. Dorsum of the abdomen whitish tinged with brown, a basal lanceolate mark is outlined by brown spots and continues posteriorly in the form of an irregular median longitudinal band. Venter lighter than the dorsum and sides, being white and unmarked.

Anterior row of eyes straight, narrower than the slightly procurved posterior row (19/23). Anterior median eyes closer to the anterior lateral than to each other, separated from each other by about a diameter, from the anterior lateral eyes by about five-sevenths of a diameter and larger than the latter. Eyes of the posterior row subequal and equidistant, separated by about two diameters. Median ocular quadrangle wider than long (20/17), slightly wider behind than in front, the posterior eyes about five-sevenths as large as the anterior. Clypeus equal in height to about one-half the diameter of an anterior median eye. Chelicerae, 2.18 mm long; lower cheliceral margin armed with three teeth, upper margin armed with two. Tibiae I armed with 2-2 spines below; spination of the animal's left tibia II irregular, apparently involving 2-1r-2-1r spines below, spination of the right tibia normal, involving 2-2 spines below. Tibia and patella I, 7.13 mm long (tibia alone, 4.65 mm); tibia and patella IV, 5.45 mm long (tibia alone, 3.66 mm).

Epigynal area small, the atrium more or less heart shaped, provided with a lobe which extends caudally from the anterior border and divides the anterior three-fourths of the atrium into two parts. For further details regarding the structure of the epigynum see Fig. 3.

Type locality.—Arizona: Female holotype from Phoenix, May, 1935, in the Collection of Prof. R. V. Chamerlin.

HETEROPODA Latreille

Nouv. Dict. Hist. Nat., XXIV: 135. 1804. Genotype: *Aranea venatoria* Linnaeus.

Cephalothorax about as wide as long or slightly longer than wide. Eyes in two rows with the anterior row straight or procurved and narrower than the straight or slightly recurved posterior row. Anterior median eyes smaller than the anterior lateral and usually closer to the latter than to each other. Posterior median eyes usually smaller than the posterior lateral. Clypeus higher than the diameter of an anterior lateral eye. Lower cheliceral margin armed with four teeth, upper margin armed with two or three teeth. Anterior tibiae armed with 2-2-2-2 spines below.

Heteropoda venatoria (Linn.)

Aranea venatoria Linnaeus, Syst. Nat. 12th Ed. p. 1035, 1767.

This often-described cosmopolitan tropical species has long been known to occur in our Southwestern states and in Florida. Inasmuch as it has been considered by many authors and good descriptions and figures are generally available, it is not redescribed at this time.¹⁵

ENTOMOLOGY.—*The cinerosus group of the genus Laevicephalus (Homoptera: Cicadellidae).*¹ P. W. OMAN, Bureau of Entomology and Plant Quarantine.

The six species treated in this paper form a remarkably homogeneous group on the basis of habitus, coloration, and certain structural details of the genitalia, and by these characters may be distinguished from other members of the genus *Laevicephalus*. The ground color of the head is pale cinereous to pale, sordid yellow; never green or greenish tinged. The crown has a pair of oblique fuscous or brown dashes at the apex and two pairs of similarly colored, irregularly quadrate spots on the disk. The facial sclerites are usually fuscous, the clypeus, at least laterally, is marked with transverse bars of brown or fuscous, and the thorax and abdomen are variously marked with fuscous.

The male valve is large and triangular, the plates broad and rather short and furnished laterally with a few spine-like setae. The distal portion of the style is definitely foot-shaped in outline and serrate on the posterior margin. The base of the aedeagus is furnished with a more or less flaring, submembranous portion for muscular attach-

¹⁵ Excellent figures may be found in F. Cambridge's *Biologia Centrali-Americanica*, II: 120, pl. VIII, figs. 22a-c, 23a-f. 1905. For the synonymy of this species see also Petrunkevitch's catalogue in Bull. Amer. Mus. Nat. Hist. 29: 488. 1911.

¹ Received August 12, 1937.

ment. The pygoferes of both sexes are densely set with numerous stout setae and the seventh sternite of the female has the posterior margin either incised or emarginate and bordered with fuscous or black medially.

With the exception of specimens from southern Utah and south central Washington, all the available distribution records for members of the *cinerosus* group are from California.

KEY TO THE SPECIES OF THE CINEROSUS GROUP

- 1 Posterior margin of seventh sternite of female broadly emarginate; male plates bluntly rounded distally. *incongruus*, n.sp.
- Posterior margin of seventh sternite of female not broadly emarginate; male plates pointed distally. 2
- 2(1) A rather short and robust species, fore wings not extending beyond tip of abdomen. *pacificus*, n.sp.
- Elongate and slender species, fore wings extending beyond tip of abdomen. 3
- 3(2) Male plates not contiguous for entire length, the tips diverging. Posterior margin of seventh sternite of female with two pairs of dentate projections, the inner pair nearly as large as the outer pair. *cinerosus* (Van D.)
- Male plates contiguous for entire length. Posterior margin of seventh sternite of female either not quadridentate or, if so, with inner pair of projections much smaller than outer pair. 4
- 4(3) Processes of aedeagus reduced to short, dentate projections. Posterior margin of seventh sternite of female triangularly produced and narrowly incised. *joaquinus*, n.sp.
- Processes of aedeagus longer, not dentate. Posterior margin of seventh sternite of female not narrowly incised. 5
- 5(4) Aedeagus with two pairs of pointed processes distally. Inner pair of dentate projections on posterior margin of seventh sternite of female rudimentary. *angelus*, n.sp.
- Aedeagus with one pair of pointed processes distally. Inner pair of dentate projections on posterior margin of seventh sternite of female small but distinct. *siskiyou*, n.sp.

Laevicephalus incongruus, n. sp.

Figs. 1, 7, 13

Larger and paler than *cinerosus*, with the male plates blunt and the posterior margin of the seventh sternite of the female broadly emarginate. Length of male 4-4.5 mm., of female 4.5-4.9 mm.

Ground color sordid yellowish white, oblique dashes on anterior margin of crown fuscous, marks on disk of crown pale brown, fuscous borders of cells of fore wing faint or absent, fore wings subhyaline.

Seventh sternite of female rather short, the median one-half of the posterior margin emarginate about one-third the distance to base. Male valve unusually large; plates short and blunt, not contiguous on median line.

Distal portion of aedeagus slender and strongly decurved, apex bifurcate.

Basal portion of aedeagus unusually large and flaring. Style slender.

Holotype male, allotype female, and 85 paratypes, including specimens of both sexes, collected above Mint Canyon, Calif. June 8, 1935, by the writer

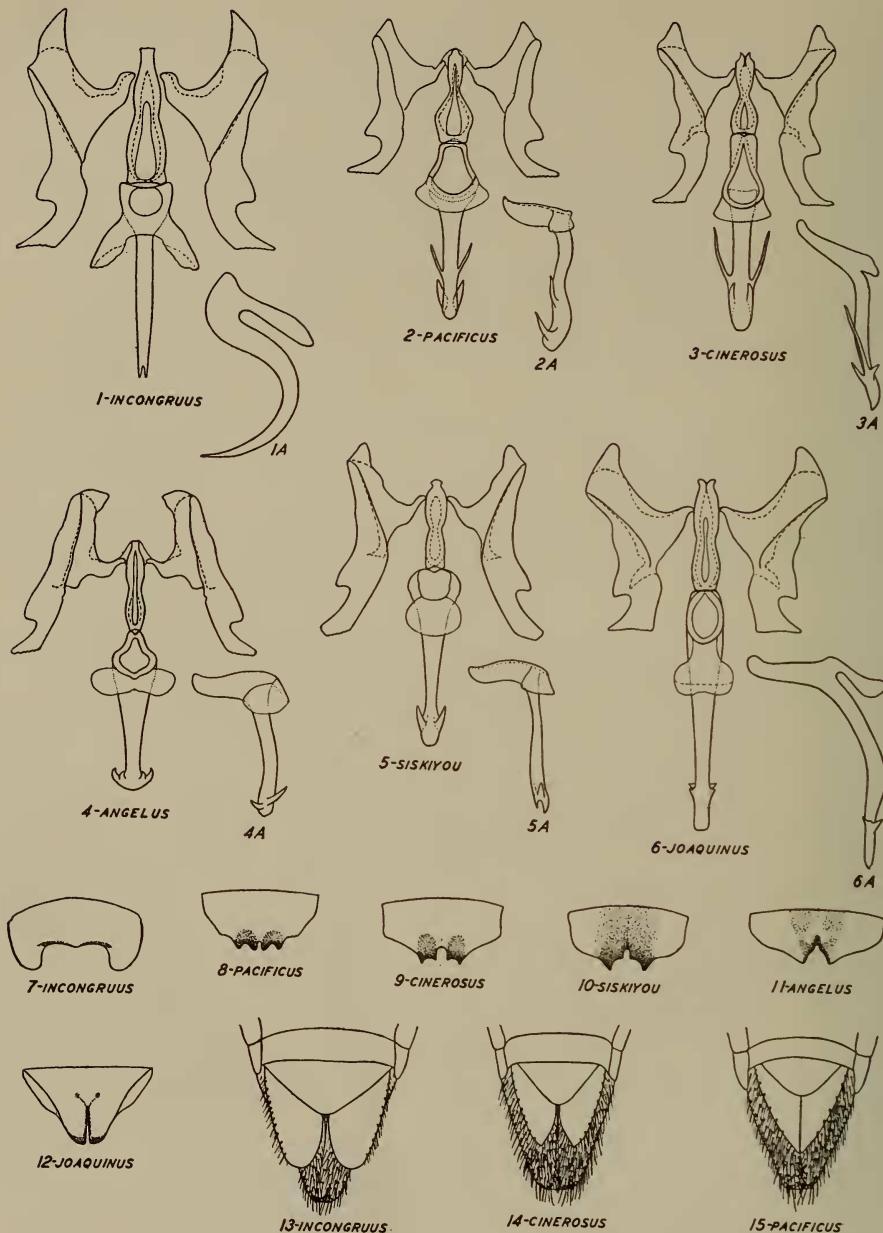


Fig. 1.—*Laevicephalus incongruus*, dorsal view of internal genital structures of male; 1A, lateral view of aedeagus. Fig. 2.—*L. pacificus*, dorsal view of internal genital structures of male; 2A, lateral view of aedeagus. Fig. 3.—*L. cinerosus*, dorsal view of internal genital structures of male; 3A, lateral view of aedeagus. Fig. 4.—*L. angelus*, dorsal view of internal genital structures of male; 4A, lateral view of aedeagus. Fig. 5.—*L. siskiyou*, dorsal view of internal genital structures of male; 5A, lateral view of aedeagus. Fig. 6.—*L. joaquinus*, dorsal view of internal genital structures of male;